conducted. Randomised controlled trials (RCTs) were of 24 weeks (± 6 weeks) treatment duration. Bayesian fixed-effect (FE) and random-effects (RE) models were used to estimate the relative efficacy and tolerability, and 95% credible intervals (CrIs). **RESULTS:** Fourteen RCTs were included. The RE model was selected a priori over the FE model. The FE model did not provide a better fit to the data, based on the deviance information criterion. EQW was statistically significantly better than placebo (mean; 95% CrI) (-1.09%; -1.62% to -0.53%) in reducing HbA1c. EQW obtained a statistically significant reduction in HbA1c relative to lixisenatide 20ug QD. Favourable point estimates that did not reach statistical significance were observed for EQW vs. albiglutide 30mg QW, exenatide 5ug and 10ug twice daily (BID), and liraglutide 1.2mg and 1.8mg once daily (QD). A model adjusting for baseline HbA1c did not provide a better fit to the data than the unadjusted model. EQW was associated with a lower risk of nausea compared to all GLP-1 RAs, except exenatide 5ug BID (none of these differences were statistically significant). Risk of discontinuation due to adverse events was lower for EQW than for dulaglutide 1.5mg QW, and liraglutide 1.2mg and 1.8mg QD, and higher for EQW than for lixisenatide 20ug QD and exenatide 5ug and 10ug BID (none of these differences were statistically significant). **CONCLUSIONS:** Evidence suggests that EQW is an effective, well-tolerated therapeutic option for the treatment of T2DM in adults inadequately controlled on MET alone.

PDB5

NETWORK META-ANALYSIS (NMA) TO ASSESS RELATIVE EFFICACY MEASURED AS PERCENTAGE OF PATIENTS TREATED TO HBA1C TARGET WITH CANAGLIFLOZIN IN PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM) INADEQUATELY CONTROLLED ON METFORMIN AND SULPHONYLUREA (MET+SU)

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OBJECTIVES: The growing prevalence of T2DM in Europe poses a significant economic and healthcare burden, mainly due to diabetes-related complications. Maintaining HbA1c below 7% has been shown to reduce the risk of complications in the longer term. In the absence of direct evidence comparing sodium glucose co-transporter 2 (SGLT2) inhibitors, indirect comparisons are needed to inform clinical and policy decisions. This analysis assessed the proportion of patients reaching the defined HbA1c goal of less than 7% with canagliflozin versus dapagliflozin and empagliflozin added to MET+SU. **METHODS:** A systematic literature review identified 14 randomised controlled trials, which were used to perform a Bayesian NMA to estimate the relative efficacy of canagliflozin added to MET+SU at 26±4 weeks. Relative efficacy was evaluated based on odds ratios (ORs) of the proportions of patients reaching the HbA1c target and Bayesian pairwise probabilities (P). Interpretation of results was based on ORs and P, where P≤30% indicated a smaller effect and P≥70% a larger effect. **RESULTS:** Canagliflozin 100 mg had similar odds of reaching HbA1c<7% compared to dapagliflozin 10 mg and empagliflozin 25 mg (ORs of 1.12 [P=60%] and 0.94 [P=44%], respectively), and higher odds versus empagliflozin 10 mg (OR of 1.26 [P=73%]). Patients treated with canagliflozin 300 mg had higher odds of reaching HbA1c<7% versus dapagliflozin 10 mg and empagliflozin 25 and 10 mg (ORs of 2.03 [P=94%], 1.71 [P=93%], and 2.29 [P=99%], respectively). **CONCLUSIONS:** This NMA of add-on therapies to MET+SU suggests that the odds of achieving HbA1c<7% at 26 weeks were at least similar for canagliflozin 100 mg and greater for canagliflozin 300 mg versus dapagliflozin and empagliflozin.

PDB6

A NETWORK META-ANALYSIS (NMA) TO ASSESS THE LONGER-TERM RELATIVE EFFICACY OF CANAGLIFLOZIN IN PATIENTS WITH TYPE 2 DIABETES INADEQUATELY CONTROLLED ON METFORMIN

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OBJECTIVES: To assess the relative efficacy of canagliflozin, a sodium glucose co-transporter 2 (SGLT2) inhibitor, as add-on to metformin, versus newer anti-hyperglycaemic agents (AHAs) that were not studied in phase 3 trials, namely glucagon-like peptide-1 receptor agonists and other SGLT2 inhibitors (i.e., dapagliflozin and empagliflozin). Data from trials 102 to 104 weeks in length were included to compare the longer-term efficacy. **METHODS:** Bayesian NMAs of HbA1c, weight and systolic blood pressure (SBP) change were conducted. Networks had treatment- and dose-specific nodes where feasible. As two different methods to account for missing data were used in the publications (last observation carried forward [LOCF] and mixed model repeated measures [MMRM]), two separate networks were constructed for each outcome. Interpretation of results was based on absolute differences and Bayesian probabilities for treatments to perform better than others (P), where P≤30% and P≥70% indicated a smaller and larger effect, respectively. **RESULTS:** The systematic review identified 11 studies. Seven and five studies were included in LOCF and MMRM networks, respectively. In the LOCF analysis, canagliflozin 300mg ranked first with greater HbA1c reductions than liraglutide 1.2mg/1.8mg and empagliflozin 25mg (D=–0.11%, –0.09%, –0.08%); canagliflozin 100mg had similar HbA1c reductions. Both canagliflozin doses had higher weight reductions than liraglutide 1.2mg/1.8mg and similar reductions versus empagliflozin 25mg. Both canagliflozin doses had greater SBP-lowering than liraglutide 1.2mg/1.8mg (D=–1.11 to –2.68mmHg) and a lower effect versus empagliflozin 25mg (D=0.81 to 1.87mmHg). In the MMRM network, canagliflozin 300 and 100mg had greater and similar HbA1c reductions, respectively, versus dapagliflozin. Weight loss was marginally higher for dapagliflozin (D=0.42 to 0.59kg). Both canagliflozin doses conferred at least similar SBP-lowering versus dapagliflozin. **CONCLUSIONS:** These NMAs suggest that over 2 years, canagliflozin offers the opportunity for improved glycaemic control compared with other AHAs, with the added benefits of weight loss and BP reduction.

PDB7

BAYESIAN NETWORK META-ANALYSIS (NMA) TO ASSESS THE RELATIVE EFFICACY OF CANAGLIFLOZIN IN PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM) INADEQUATELY CONTROLLED WITH INSULIN

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OBJECTIVES: To assess the relative efficacy of canagliflozin, a sodium glucose co-transporter 2 inhibitor (SGLT2) as add-on to insulin +/- oral antihyperglycaemic drugs for the treatment of T2DM compared to dipeptidyl peptidase-4 inhibitors (DPP-4s), glucagon-like peptide-1 receptor agonists (GLP-1s), sulphonylureas, pioglitazone, and other SGLT2 inhibitors, using Bayesian NMA methods. **METHODS:** A systematic literature review was conducted according to NICE guidelines and available data on HbA1c, weight and systolic blood pressure (SBP) were extracted. Networks were based on treatment- and dose-specific nodes, except for sulphonylureas where doses were combined. Selection of fixed versus random effects was based on the deviance information criterion. Results were interpreted based on absolute differences and Bayesian probabilities for treatments to perform better than others (P), where P≤30% indicated a smaller effect and P≥70% a larger effect. **RESULTS:** Eighteen trials reported results at 26 +/- 4 weeks. HbA1c reductions were highest for liraglutide 1.8mg, pioglitazone 45mg and glibenclamide. Canagliflozin 300mg had greater HbA1c reductions than all remaining comparators, except for exenatide where the reduction was similar. Canagliflozin 100mg had a greater reduction than dapagliflozin 5mg, vildagliptin, saxagliptin and lixisenatide and a similar reduction versus DPP-4s, glimepiride, lixisenatide, pioglitazone 30mg, metformin and dapagliflozin 10mg. Both dosages of canagliflozin were associated with greater weight loss than DPP-4s, glibenclamide, pioglitazone 30mg and dapagliflozin (Δ=–2.13 to –3.45kg; Δ=–7.61 to –8.25kg; Δ=–3.34 to –3.95kg; Δ=–0.44 to –1.73kg, respectively). Weight reductions were highest for liraglutide 1.8mg and exenatide 10μg. Both dosages of canagliflozin had higher SBP reductions than dapagliflozin and saxagliptin; at least similar reductions were estimated versus exenatide 10μg. **CONCLUSIONS:** These results suggest that canagliflozin is a valuable treatment option as add-on to insulin therapy, as it provides not only similar or better glucose lowering than many other options, but also weight loss.

PDB8

ACHIEVEMENT OF GLYCAEMIC TARGETS WITH CANAGLIFLOZIN IN TRIPLE THERAPY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM)

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OBJECTIVES: Improving glycaemic control is the primary goal of T2DM management and can help to reduce the risk of micro- and macrovascular complications. Guidelines from the European Association for the Study of Diabetes (EASD) and the National Institute for Health and Care Excellence (NICE) recommend lowering HbA1c to levels <7.0% and <7.5%, respectively. Canagliflozin, an agent that inhibits sodium glucose co-transporter 2, has been shown to reduce HbA1c, body weight, and blood pressure in a broad range of patients with T2DM. The objective of this study was to evaluate the proportions of T2DM patients achieving glycaemic targets with canagliflozin 100mg (CANA100) and canagliflozin 300mg (CANA300) versus placebo in triple therapy as add-on to metformin plus sulphonylurea (MET+SU). **METHODS:** Data were used from a 52-week Phase 3 study evaluating CANA100 and CANA300 versus placebo in T2DM patients on background MET+SU (N=457; mean HbA1c, 8.1%). The proportions of patients with baseline HbA1c ≥7.0% or ≥7.5% who achieved HbA1c <7.0% or <7.5%, respectively, were assessed at weeks 26 and 52. Patients with missing efficacy data were considered as non-responders. Odds ratios (ORs; [95% confidence interval]) by treatment were calculated using logistic regression. **RESULTS:** Among patients with baseline HbA1c ≥7.0% (n=425), a higher proportion achieved HbA1c <7.0% with CANA100 (29.1%; OR=2.65 [1.47;4.95]) and CANA300 (40.1%; OR=4.34 [2.45;7.98]) versus placebo (13.4%; reference) at week 52. Similarly, a higher proportion of patients with baseline HbA1c ≥7.5% (n=330) achieved HbA1c <7.5% with CANA100 (45.5%; OR=4.13 [2.24;7.91]) and CANA300 (54.1%; OR=5.82 [3.15;11.15]) versus placebo (16.8%; reference) at week 52. Absolute response rates were higher at 26 weeks, but relative treatment effects were consistent between 26 and 52 weeks. **CONCLUSIONS:** Patients with T2DM treated with canagliflozin 100 and 300mg as add-on to MET+SU are more likely to achieve HbA1c targets of <7.0% and <7.5% compared to MET+SU only.

PDB9

LIRAGLUTIDE VS OTHER DAILY GLP-1 ANALOGUES IN PEOPLE WITH TYPE 2 DIABETES: A NETWORK META-ANALYSIS

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OBJECTIVES: For people with Type 2 Diabetes Mellitus (T2DM) insufficiently controlled with oral antidiabetic drugs (OADs), GLP-1 analogues proved to offer glycaemic control while mitigating the weight gain common with insulin. However, limited head-to-head evidence exists comparing daily GLP-1 analogues in this population. The aim of this study was to evaluate the relative efficacy and safety of liraglutide relative to other daily GLP-1 agonists for the treatment of people with T2DM not previously treated with insulin. **METHODS:** Following a systematic literature review, randomized controlled trials evaluating the following interventions in adults with T2DM were selected: liraglutide (1.2mg and 1.8mg), exenatide (5mcg and 10mcg BID), and lixisenatide (20mcg). Based on the available data we conducted network meta-analysis (NMA) for the following outcomes: Change from baseline HbA1c, proportion of patients meeting HbA1c target level, fasting plasma glucose (FPG), post-prandial glucose (PPG), systolic blood pressure (SBP), and weight, as well as rates of hypoglycemic events (severe and mild). **RESULTS:** Liraglutide was found to